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Claims

1. Ceramic element (1) with at least one substantially homogenous ceramic layer (2),
5 characterized in that
the ceramic layer (2) has a plurality of partial ceramic layers (3) arranged one on top of the other.
2. Ceramic element according to Claim 1,
10 in which the partial ceramic layers (3) have a ceramic material (6) selected from the group of green ceramics and/or sintered ceramics.
3. Ceramic element according to Claim 1 or 2,
15 in which one of the partial ceramic layers (3) has a partial layer thickness (4) selected from the range 5 μm to 250 μm inclusive.
4. Ceramic element according to one of Claims 1 to 3,
20 in which the ceramic layer (2) has an overall layer thickness (5) selected from the range 10 μm to 5mm inclusive.
5. Ceramic element according to one of Claims 1 to 4,
in which at least one electrode layer (8) is arranged on at
25 least one surface section (7) of the ceramic layer (2).
6. Ceramic element according to Claim 5,
in which at least one further electrode layer (10) is arranged
on at least one further surface section (9) of the ceramic
30 layer (2) such that the electrode layers (8, 10) are arranged
opposite each other and the ceramic layer (2) is arranged
between the electrode layers (8, 10).

7. Ceramic element according to Claims 5 or 6,
in which at least one of the electrode layers (8, 10) is
arranged between the ceramic layer (2) and at least one
further ceramic layer (13).

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8. Ceramic element according to one of Claims 2 to 7,
in which the ceramic material (6) comprises a piezo-ceramic.

9. Ceramic element according to Claim 8,
10 in which the piezo-ceramic (6) is a lead zirconate titanate.

10. Ceramic element according to one of Claims 1 to 9,
the element (1) being selected from the group of piezo-
electric transformers (11) or piezo-electric bending
15 transducers (12).

11. Method for producing a ceramic element according to one
of Claims 1 to 10,

characterized by the following method steps:

20 a) arranging the homogenous partial ceramic layers one on top
of the other to form a stack and
b) compacting the stack, the ceramic element being formed with
the ceramic layer.

25 12. Method according to Claim 11,
ceramic green films with a green ceramic being used as the
homogenous partial ceramic layers.

13. Method according to Claim 11 or 12,
30 compacting of the stack including laminating.

14. Method according to one of Claims 11 to 13,
compacting of the stack including heat treatment of the stack.